PILLOW AND PILLOW COVER

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Field of the Invention

The present inventions relates generally to beds. More particularly, the present invention relates to support means for the head and/or neck of a user (e.g., a pillow).

Background Of Invention

Pillows are widely used to provide comfort while sleeping, relaxing, meditating, etc. A travel pillow is one example of a pillow. When traveling, people often desire to bring along a pillow to provide for comfortable sleeping during their travels. Typically, it is desirable that travel pillows be smaller then standard bedding pillows to facilitate packing. A general goal of "travel" pillows is that they be suitable for compact storage so that they do not take up too much valuable storage space. While being suitable for compact storage, it is also desirable that travel pillows be comfortable and simulate standard pillows in this regard. As travel pillows may be used in unprotected environments another goal of such pillows is that they are able to be easily cleaned.

A common problem with pillows when traveling is that they may become dirty and require washing, and subsequent drying, or may become wet and require drying. This is especially a problem in travel situations such as camping. When the pillow becomes dirty and is cleaned, it is typically necessary to hang the pillow to allow the pillow to dry. This may be accomplished with clothespins or by otherwise gerry-rigging a suspension of the pillow. Alternately, the pillow is left unsuspended to dry, requiring longer drying time.

A related problem is the frequency with which such pillows become dirty. If used outdoors, it is likely that the pillow will come into contact with the ground or dirt. It is,

obviously, undesirable to sleep on a dirty pillow. For this reason, a washable pillow cover may be used to protect the pillow. For insertion of the pillow into the pillow cover and subsequent removal of the pillow from the pillow cover, an opening must be provided in the pillow cover. When using a pillow cover, the pillow cover can be removed from the pillow and washed without requiring washing of the pillow. Unfortunately, dirt may make its way through the opening of the pillow cover and onto the pillow, thereby soiling the pillow. Thus, it is still often required to wash the pillow. Further, depending on the placement of any seam, the seams of the pillow cover may be uncomfortable against the face.

Summary Of Invention

The present invention relates to a compactable pillow that is configured for fast drying and a pillow cover suitable for preventing soiling of the pillow is disclosed. In particular, the pillow includes a component, for example a loop, for receiving a suspension device. The pillow cover has overlapping flaps to allow receipt of the pillow while minimizing infiltration of dirt through an the pillow cover. The flaps overlap in a manner to maximize surface area of the pillow for comfort while minimizing infiltration of dirt onto the pillow.

The pillow of the present invention man be configured as any shape. In one embodiment, the pillow comprises two sheets of generally rectangular material, each sheet having a top edge, a bottom edge, and two side edges, four corners being formed by the meeting of the edges. The first sheet is sewn or otherwise attached to the second sheet, along the top edge, bottom edge, and side edges, to form the outer casing of the pillow. The stitching may be especially durable, for example with double stitching. As an alternative to stitching, the first sheet may be attached to the second sheet via heat sealing or other suitable method. Optionally, a cording or piping is

provided along the seam between the first and second sheets. The sheets of material may be made of nylon or other suitable material. The outer casing is stuffed with a fill material.

A component for enabling the pillow to be suspended is provided on the pillow. In one embodiment, the component is a loop for receiving a suspension device and is provided at a point along the perimeter of the pillow. The component may be an extension of the cording or piping optionally provided along the seam between the first and second sheets. Alternately, the component may be separately applied to the pillow. The component may be provided at one of the corners of the outer casing where it is seamed between the first and second sheets of material. Using the component, the pillow may be suspended from a suspension device to air dry. The component may also be used for other purposes such as, for example, receiving a hook for attaching the pillow to a backpack during travel.

In one embodiment, the pillow cover of the present invention comprises a front cloth and a back cloth, each cloth having top bottom, left and right edges and the front and back cloths being disposed to meet along the top, bottom, left and right edges. The pillow cover is preferably configured to approximately match the dimensions of the pillow. The bottom, left, and right edges of the front and back cloths are seamed together. The top edge is left open to allow the pillow to be inserted in the cover. Additionally, each of the front and back cloths is provided with a flap that extends over the top of the pillow when the pillow is inserted in the cover. The flaps are designed to extend over the top of the pillow, as inserted into the cover. Thus, the pillow is inserted, the back flap is extended over the top of the pillow to the front side and the front flap is extended over the back flap to the back side. The flap arrangement minimizes the infiltration of the dirt into the pillow cover. The extension of the front flap over

the back flap to the back side is designed to end at a curve along the back side of the pillow cover. This design maximizes the surface are of the back side not covered by the front flap.

Brief Description Of The Drawings

Figure 1 is a plan view illustrating a pillow in accordance with an exemplary embodiment of the present invention.

Figure 2 is a plan view illustrating a pillow cover in accordance with one embodiment of the present invention.

Figure 3 is a plan view of a pillow in accordance with an additional exemplary embodiment of the present invention.

Figure 4 is a cross sectional view of a pillow in accordance with an additional exemplary embodiment of the present invention.

Figure 5 is an enlarged cross sectional view illustrating a flange of a pillow shown in the previous figure.

Figure 6 is a plan view of a pillow in accordance with yet another exemplary embodiment of the present invention.

Figure 7 is a cross-sectional view of a panel in accordance with an exemplary embodiment of the present invention.

Figure 8 is an isometric view of a panel in accordance with an exemplary embodiment of the present invention.

Figure 9 is a plan view of a blank in accordance with an exemplary embodiment of the present invention.

Figure 10 is an additional plan view of a blank shown in the previous figure.

Figure 11 is an additional plan view of a blank shown in the previous figure.

Figure 12 is an additional plan view of a blank shown in the previous figure.

Figure 13 is a plan view of a pillowcase shown in the previous figure.

Figure 14 is a plan view showing a pillowcase shown in the previous figure.

Detailed Description Of The Preferred Embodiments

The following detailed description should be read with reference to the drawings, in which like elements in different drawings are numbered identically. The drawings, which are not necessarily to scale, depict selected embodiments and are not intended to limit the scope of the invention. Examples of constructions, materials, dimensions, and manufacturing processes are provided for selected elements. All other elements employ that which is known to those of skill in the field of the invention. Those skilled in the art will recognize that many of the examples provided have suitable alternatives that can be utilized.

Figure 1 is a plan view illustrating a pillow in accordance with an exemplary embodiment of the present invention. Of course, the pillow can be configured in any shape or size but should be suitable for travel. The pillow includes an outer casing that is stuffed with a fill material such as down, synthetic down, polyester, poly fiber, cotton, wool or other suitable fill. Desirably, the fill is such that the pillow may be compacted to a size smaller than its size uncompacted. In the embodiment shown, the outer casing comprises first and second sheets of material. It is desirable for the first and second sheets to be manufactured of a relatively fast-drying material such as nylon. Alternately, the sheets may be manufactured of polartec or other suitable material.

In the embodiment of figure 1, the first and second sheets of material mirror one another; each sheet of material is a rectangle having top, bottom, and side edges. The first and second sheets of material are sewn, or otherwise attached, together along the edges to form the outer casing. The attachment of the first sheet to the second sheet provides seams along the top,

bottom, and side edges. The seams may be stitched with especially durable stitching. For example, the seams may be double stitched. Alternately, the seams may be provided via heat sealing or other suitable method. As an alternative to providing first and second sheets of material seamed together, the pillow casing may be formed of a single sheet of material folded and seamed along three edges.

A component for receiving a suspension device is provided on the pillow. In the embodiment of figure 1, the component is positioned along the seam of the outer casing. In the embodiment shown, the component comprises a loop. In order to reinforce attachment of the component to the pillow, it is desirable that the component be provided within the seam of the first sheet of material to the second sheet of material. However, the component may be attached to the pillow at any suitable location in any suitable manner. The component may be elastic or other soft, flexible material such that the component does not interfere with the comfort of the pillow.

In use, the component may be used to receive a hook or other suspension device. The pillow may be suspended, using the component, for air drying. Alternately, the component may be used for suspending the pillow to a backpack or other device for easy transport, or for other suitable use.

Figure 2 is a plan view illustrating a pillow cover in accordance with one embodiment of the present invention. The pillow cover of Figure 2 is coordinated to the pillow shown in Figure 1. That is, the shape and size of the pillow cover of Figure 2 is configured to receive the pillow of Figure 1. As with the pillow, the pillow cover may be provided in any shape or size desired. The pillow cover comprises a front cloth and a back cloth that meet along the top, bottom, left and right edges. Alternately, the pillow cover may comprise a single cloth. The cloth or cloths

may be manufactured of any material. Depending on usage, the material may be rugged and capable of use in extreme environments or may be soft and comfortable against the skin. Regardless, it is desirable that the material of the pillow cover be suitable for washing. Example materials include cotton, nylon, polartec, jersey knit, polyester, and fleece. The bottom, left, and right edges of the front and back cloths are seamed together. Of course, if only one sheet of material is used, one of the seams is substituted with a fold of the material.

The top edge of the cover is not seamed, allowing the pillow to be inserted in the cover. It should be appreciated that any edge of the pillow, not necessarily the top edge, may be alternately left open. The choice of the top edge is intended merely to be illustrative. Whichever edge is not seamed leaves an opening through which the pillow is inserted. Each of the front and back cloths is provided with a flap at the top edge that extends over the top of the pillow when the pillow is inserted in the cover. Of course, if an edge other than the top edge is left open, the flaps are provided at that edge. The flaps are designed such that each of the flaps extend over the top of the pillow, as inserted into the cover. Thus, the pillow is inserted, the back flap is extended over the top of the pillow to the front side and the front flap is extended over the back flap to the back side, the flaps overlapping one another. The front flap ends in a curve. The front flap is preferably designed such that it extends over the back flap and the back side of the pillow cover only to an extent minimizing infiltration of dirt into the pillow cover while maximizing surface area of the back side of the pillow cover not covered by the front flap.

As seen in Figure 2, the flaps are seamed along the side edges of the pillow. The back flap may end in a curve or other shape. As the front flap has minimal impact on the comfort of the back side of the pillow cover, the pillow may be used with either the front side or the back

side of the pillow cover up. In this manner, if the front side of the pillow cover were to become slightly wet or dirty, the pillow could be flipped and the back side of the pillow over used.

Further, a compression bag may be provided with the pillow and, optionally, the pillow cover, such that insertion of the pillow into the compression bag compacts the pillow and causes the pillow to decrease in volume. It should be appreciated, however, a compression bag is not necessary to compact the pillow. If it is desired to compact the pillow without a compression bag, the pillow may be compacted, for example, by packing it into a small space in a backpack or suitcase.

Figure 3 is a plan view of a pillow 100 in accordance with an additional exemplary embodiment of the present invention. Pillow 100 of figure 1 comprises a first panel 102 and a second panel (not visible in figure 3) that are coupled together at a seam 104. In the embodiment of figure 3, the first panel and the second panel form a casing 106 that defines a cavity 108.

In the embodiment of figure 3, seam 104 comprises an inner line of stitches 120 and an outer line of stitches 122. A central portion 124 of first panel 102 extends inwardly from inner line of stitches 120. A flange 126 of pillow 100 extends outwardly from cavity 108 defined by casing 106. As shown in figure 3, inner line of stitches 120 and outer line of stitches 122 are both disposed on flange 126 of pillow 100. A bead 134 of flange 126 is shown encircling pillow 100 in figure 3.

Figure 4 is a cross sectional view of a pillow 300 in accordance with an additional exemplary embodiment of the present invention. Pillow 300 of figure 4 comprises a first panel 302 and a second panel 330 that define a cavity 308. With reference to figure 4, it will be appreciated that a fill 332 is disposed in cavity 308.

In some useful embodiments of the present invention, fill 332 provides mechanical resistance to compression. Fill 332 may comprise various materials without deviating from the spirit and scope of the present invention. Materials that may be suitable in some applications include down (e.g., goose down) and fiber fill. One fiber fill that may be suitable for use in some applications is identified by the tradename PRIMALOFT, this material is commercially available from Albany International Corp. of Albany, New York.

In the embodiment of figure 4, an inner line of stitches 320 and an outer line of stitches 322 fix a first peripheral portion 336 of first panel 302 and a second peripheral portion 338 of second panel 330 relative to one another. With reference to figure 4, it will be appreciated that first peripheral portion 336 of first panel 302 includes a first fold 340. With continuing reference to figure 4, it will also be appreciated that second peripheral portion 338 of second panel 330 includes a second fold 342.

In figure 4, a central portion 324 of first panel 302 is shown extending inwardly from inner line of stitches 320. Similarly, a central portion 324 of second panel 330 extends inwardly from inner line of stitches 320. A flange 326 of pillow 300 extends outwardly from cavity 308. As shown in figure 4, inner line of stitches 320 and outer line of stitches 322 both extend through a flange 326 of pillow 300. With reference to figure 4, it will be appreciated that flange 326 comprises a bead 334.

Figure 5 is an enlarged cross sectional view illustrating flange 326 of pillow 300 shown in the previous figure. In the embodiment of figure 5, flange 326 of pillow 300 includes a bead 334. In the embodiment of figure 5, bead 334 comprises a cord 344 and a wrap 346 that is disposed about cord 344. In the embodiment of figure 5, a tail 348 of wrap 346 extends between

first peripheral portion 336 of first panel 302 and second peripheral portion 338 of second panel 330. In the embodiment of figure 5, a third line of stitches 350 extends through wrap 346.

In figure 5, a first airflow path 352 is shown at the interface between wrap 346 and first peripheral portion 336 of first panel 302. Also in figure 5, a second airflow path 354 is shown at the interface between wrap 346 and second peripheral portion 338 of second panel 330. Additionally, a plurality of needle holes 356 are shown extending through flange 326 of pillow 300. With reference to figure 5, it will be appreciated that central portion 324 of first panel 302 and central portion 324 of first panel 302 are free of needle holes in the embodiment of figure 4 and figure 5.

In some useful embodiments of the present invention, first panel 302 and second panel 330 are capable of directing air disposed within cavity 308 toward flange 326 during compression of pillow 300. For example, a volume of air may exit cavity 308 via first airflow path 352, second airflow path 354, and needle holes 356. In some cases, the first panel 302 and second panel 330 are sufficiently impermeable that the volume of air exiting cavity 308 proximate flange 326 during compression of pillow 300 is greater than a volume of air passing through first panel 302 and second panel 330 during compression of pillow 300. When this is the case, pillow 300 may be capable of providing balloon-like cushioning. The cushioning provided by pillow 300 may be a combination pneumatic cushioning provided by a casing of pillow 300 and mechanical cushioning provided by fill 332.

Figure 6 is a plan view of a pillow 400 in accordance with yet another exemplary embodiment of the present invention. Pillow 400 of figure 6 comprises a first panel 402 and a second panel (not visible in figure 6) that are coupled together at a seam 404. In the embodiment of figure 6, the first panel and the second panel form a casing 406 that defines a cavity 408.

In the embodiment of figure 6, a hand 458 is shown compressing pillow 400. In the embodiment of figure 6, air 460 is shown exiting pillow 400 as it is compressed. In figure 6, air 460 is illustrated using a plurality of arrows. With reference to figure 6, it will be appreciated that air 460 is exiting cavity 408 proximate seam 404.

In the embodiment of figure 6, seam 404 comprises an inner line of stitches 420 and an outer line of stitches 422. A central portion 424 of first panel 402 extends inwardly from inner line of stitches 420. A flange 426 of pillow 400 extends outwardly from cavity 408 defined by casing 406. As shown in figure 6, inner line of stitches 420 and outer line of stitches 422 are both disposed on flange 426 of pillow 400.

In some cases, casing 406 is sufficiently impermeable that the volume of air exiting cavity 408 proximate seam 404 during compression of pillow 400 is greater than a volume of air passing through casing 406 during compression of pillow 400. The cushioning provided by pillow 400 may be a combination pneumatic cushioning provided by casing 406 of pillow 400 and mechanical cushioning provided by a fill 432 that is disposed in cavity 408. In the embodiment of figure 6, pillow 400 may be capable of providing parachute-like resistance.

Figure 7 is a cross-sectional view of a panel 562 in accordance with an exemplary embodiment of the present invention. In the embodiment of figure 7, panel 562 comprises a plurality of yarns 564 that are disposed in an interwoven arrangement. Yarns 564 of panel 562 may comprise various materials without deviating from the spirit and scope of the present invention. For example, yarns 564 may comprise thermoplastic or non-thermoplastic materials. Examples of thermoplastic materials that may be suitable in some applications include: polyethylene (PE), polypropylene (PP), polyvinylchloride (PVC), polyurethane,

polytetrafluoroethylene (PTFE), polyamide, polyimide, polyethylene terephthalate (PET), and polyethylene terephthalate glycol (PETG).

Figure 8 is an isometric view of a panel 662 in accordance with an additional exemplary embodiment of the present invention. In the embodiment of figure 8, panel 662 comprises a plurality of yarns 664. In the embodiment of figure 8, yarns 664 are disposed proximate one another in an interwoven arrangement. In some embodiments of the present invention, a panel may comprise a plurality of yarns defining a plurality of interstitial spaces. In figure 8, a projection 697 of an interstitial space 695 is illustrated using phantom lines. It will be appreciated that an panel may define interstitial spaces having shapes other than the one illustrated in figure 8 without deviating from the spirit and scope of the present invention.

Figure 9 is a plan view of a blank 768 in accordance with an exemplary embodiment of the present invention. In the embodiment of figure 9, blank 768 comprises a single piece of fabric 770. Blank 768 comprises an outer flap 772 and an inner flap 774. Outer flap 772 is finished with a first hem 776. Similarly, inner flap 774 is finished with a second hem 778. Blank 768 also comprises a first sheet 780 and a second sheet 782.

Figure 10 is an additional plan view of blank 768 shown in the previous figure. In the embodiment of figure 10, blank 768 has been folded so that outer flap 772 is overlaying first sheet 780. First hem 776 can be seen in figure 10.

Figure 11 is an additional plan view of blank 768 shown in the previous figure. In the embodiment of figure 11, blank 768 has been folded so that first sheet 780 overlays second sheet 782. With reference to figure 11, it may be appreciated that first sheet 780 and second sheet 782 define a pocket 784. In some methods in accordance with the present invention, blank 768 can

be used to fabricate a pillowcase. When this is the case, pocket 798 may be dimensioned to receive a pillow.

Figure 12 is an additional plan view of blank 768 shown in the previous figure. In the embodiment of figure 12, blank 768 has been folded so that inner flap 774 overlays first sheet 780. Accordingly, second hem 778 is visible in figure 12. With reference to figure 12, it will be appreciated that blank 768 has been sewn to form a pillowcase 786. Pillowcase 786 includes a first stitch row 788 and a second stitch row 790. First stitch row 788 and second stitch row 790 may serve to fix inner flap 774, outer flap 772, first sheet 780 and second sheet 782 relative to one another.

Figure 13 is a plan view of pillowcase 786 shown in the previous figure. In figure 13, pillowcase 786 has been turned inside out, relative to the configuration shown in the previous figure. Outer flap 772 can be seen overlaying first sheet 780 in figure 13. First hem 776 is also visible in figure 13. In the embodiment of figure 13, first sheet 780 and second sheet 782 define a pocket 798.

In some useful embodiments of the present invention, outer flap 772 is capable of assuming an open position in which a mouth 792 of pillowcase 786 is open and a closed position in which outer flap 772 covers mouth 792 of pillowcase 786. When mouth 792 of pillowcase 786 is open, cavity 798 of pillowcase 786 communicates with the outer atmosphere via mouth 792. In figure 13, outer flap 772 is disposed in the open position.

Figure 14 is a plan view including pillowcase 786 shown in the previous figure. In the embodiment of figure 14, outer flap 772 is disposed in the closed position. In other words, outer flap 772 has been turned inside out relative to the configuration shown in the previous figure. In figure 14, outer flap 772 can be seen overlaying second sheet 182. In the embodiment of figure

14, a pillow 700 is disposed in pocket 798. With reference to figure 14, it will be appreciated that outside flap 794 includes an arcuate edge 796. In some useful embodiment of the present invention, arcuate edge 796 is dimensioned to receive the head of a person using pillow 700 and pillowcase 786. Also with reference to figure 14, it will be appreciated that arcuate edge 796 of outer flap 772 serves to expose additional surface of second sheet 782, making that surface available for use by a person using pillowcase 786 and pillow 700.

A pillowcase in accordance with an exemplary embodiment of the present invention may comprise a first sheet and a sheet defining a pocket. The pillowcase may also comprise an outer flap having an open position in which the pocket is accessible and a closed position in which the outer flap covers a mouth of the cavity. The outer flap may comprise an arcuate edge that is shaped to receive a human head.

While particular embodiments in accordance with the present invention have been shown and described, it is understood that the invention is not limited thereto, and is susceptible to numerous changes and modification as would be obvious those skilled in the art. Therefore, the invention is not limited to the details shown and described herein, and includes all such changes and modifications as encompassed by the scope of the appended claims.